

CONTENTS OF VOLUME 22

Number 1

A. D. Surridge and Y. Goldreich	1 On the spatial characteristics of the nocturnal stable boundary layer over a complex urban terrain
P. J. Lightowlers and J. N. Cape	7 Sources and fate of atmospheric HCl in the U.K. and Western Europe
R. B. Walters, B. J. Nordenstam and R. F. Phalen	17 A generator for the production of sulfuric acid-coated diesel soot aerosols
Y. S. Ghim and J. H. Seinfeld	25 Trajectory models and the deformation of air parcels
P. G. Georgopoulos and J. H. Seinfeld	31 Estimation of relative dispersion parameters from atmospheric turbulence spectra
L. H. J. M. Janssen, J. H. A. van Wakeren, H. van Duuren and A. J. Elshout	43 A classification of NO oxidation rates in power plant plumes based on atmospheric conditions
L. Zong-Kai and G. A. Briggs	55 Simple PDF models for convectively driven vertical diffusion
P. S. Kasibhatla, L. K. Peters and G. Fairweather	75 Numerical simulation of transport from an infinite line source: error analysis
D. H. Bache	83 Extensions of finite rate diffusion theory to a continuous plume from a ground-based source in the atmospheric surface layer
S. L. Clegg and P. Brimblecombe	91 Equilibrium partial pressures of strong acids over concentrated saline solutions—I. HNO_3
C. Seigneur and P. Saxena	101 A theoretical investigation of sulfate formation in clouds
S. L. Clegg and P. Brimblecombe	117 Equilibrium partial pressures of strong acids over concentrated saline solutions—II. HCl
D. H. Bache, T. J. Lawson and S. Uk	131 Development of a criterion for defining spray drift
R. J. Engelmann	137 The scavenging ratio normalized to remove the effect of humidity
P. Kalabokas, P. Carlier, P. Fresnet, G. Mouvier and G. Toupance	147 Field studies of aldehyde chemistry in the Paris area
P. Koutrakis, J. M. Wolfson and J. D. Spengler	157 An improved method for measuring aerosol strong acidity: results from a nine-month study in St Louis, Missouri and Kingston, Tennessee
A. J. Jakeman, R. W. Simpson and J. A. Taylor	163 Modeling distributions of air pollutant concentrations—III. The hybrid deterministic-statistical distribution approach
P. Martinez and R. W. Ohline	175 Investigations into the chemical forms of electrically fixed nitrogen

H. M. ten Brink, A. J. Janssen and J. Slanina	177	Plume wash-out near a coal-fired power plant: measurements and model calculations
<i>Technical Note</i>		
C. F. Barrett, D. J. Hall, M. O. Ralph and S. L. Upton	189	The microthread method for the sizing of aerosols
<i>Letters to the Editors</i>		
G. Gilli, R. Bono, M. Calleri, G. Corrao and V. Scursatone	193	Air pollution and health: a descriptive study among populations of the urban area of Turin
S. J. Vermette and J. J. Drake	195	Modifications to the McMaster wet-only rain collector
<i>Discussions</i>		
M. Nosal, E. R. Altwicker and A. H. Johannes	197	Spatial and historical trends in acidic deposition: a graphical intersite comparison
M. L. Wesely, D. R. Cook, R. L. Hart, R. E. Speer, K. W. Nicholson and T. D. Davies	198	Field measurements of the dry deposition of particulate sulphate
<i>News Section</i>		
Introduction (D. J. Moore)	201	
Meetings	201	
New Products and Equipment	202	
Recent Titles of Interest	204	
Book Reviews (J. P. Lodge, Jr)	205	
Erratum	209	
Preparation of Papers	i	

Number 2

A. M. Spanton and M. L. Williams	211	A comparison of the structure of the atmospheric boundary layers in Central London and a rural/suburban site using acoustic sounding
J. K. S. Ching, S. T. Shipley and E. V. Browell	225	Evidence for cloud venting of mixed layer ozone and aerosols
J. M. Pacyna and M. Oehme	243	Long-range transport of some organic compounds to the Norwegian Arctic
R. H. Maryon and C. C. Heasman	259	The accuracy of plume trajectories forecast using the U.K. Meteorological Office operational forecasting models and their sensitivity to calculation schemes
K. E. Grønскеi	273	The influence of car speed on dispersion of exhaust gases
S. M. Kreidenweis and J. H. Seinfeld	283	Nucleation of sulfuric acid-water and methanesulfonic acid-water solution particles: implications for the atmospheric chemistry of organosulfur species

M. S. Hong and I. Y. Lee	297	Numerical studies of acidification processes within and below clouds with a flow-through chemical reactor model
M. Luria and J. F. Meagher	307	Computer simulation of the boundary layer oxidation and removal of atmospheric pollutants over the western Atlantic Ocean
M. R. Legrand, C. Lorius, N. I. Barkov and V. N. Petrov	317	Vostok (Antarctica) ice core: atmospheric chemistry changes over the last climatic cycle (160,000 years)
E. Berge	333	Time-trends of sulfate and nitrate in precipitation in Norway (1972-1982)
T. A. Buishand, G. T. Kempen, A. J. Frantzen, H. F. R. Reijnders and A. J. van den Eshof	339	Trend and seasonal variation of precipitation chemistry data in The Netherlands
D. Zhao, J. Xiong, Y. Xu and W. H. Chan	349	Acid rain in southwestern China
A. J. Janssen and W. A. H. Asman	359	Effective removal parameters in long-range air pollution transport models
R. Sequeira	369	On the solubility of some natural minerals in atmospheric precipitation
U. Krell and E. Roeckner	375	Model simulation of the atmospheric input of lead and cadmium into the North Sea
Y. S. Chung	383	The variations of atmospheric carbon dioxide at Alert and Sable Island, Canada
A. M. Mohan Rao and G. G. Pandit	395	Concentrations of C ₂ -C ₃ hydrocarbons in atmospheric air at Deonar, Bombay, in relation to possible sources
R. W. Coutant, L. Brown, J. C. Chuang, R. M. Riggan and R. G. Lewis	403	Phase distribution and artifact formation in ambient air sampling for polynuclear aromatic hydrocarbons
M. Hutton, A. Wadge and P. J. Milligan	411	Environmental levels of cadmium and lead in the vicinity of a major refuse incinerator
<i>Short Communications</i>		
J. A. Fay	417	Modeling the Lake Nyos gas disaster
H. B. Singh and W. Vezze	419	Enhancement of PAN abundance in the Pacific marine air upon contact with selected surfaces
E. Mészáros	423	On the possible role of the biosphere in the control of atmospheric clouds and precipitation
A. N. Nigam, R. P. Tripathi, P. Ramashesu and R. K. Chopra	425	Characterization of the iron-bearing component present in aerosol over Jodhpur, the capital city of Thar Desert (India)
D. R. Brown, H. L. Pacquette and R. A. Watlington	429	Airborne lead on St. Thomas, U.S. Virgin Islands

Discussions

- | | | |
|--|-----|---|
| M. M. Ibrahim and A. D. Surridge | 431 | Extrapolation of the nocturnal temperature inversion from ground-based measurements |
| P. K. Dasgupta, P. W. West,
D. B. Orr, J. C. Hipfner, W. H. Chan,
M. A. Lulis and J. E. Hunt | 432 | The application of a passive permeation device for the measurement of sulfur dioxide |
| A. D. Shendrikar | 433 | Development of a MNO_2 -coated cylindrical denuder for removing NO_2 from atmospheric samples |

News Section

- | | |
|---------------------------|-----|
| Introduction | 435 |
| Calendar | 435 |
| New Products and Services | 436 |
| Recent Titles of Interest | 439 |
| New Patents | i |

Number 3

- | | | |
|--|-----|--|
| S. Hameed and J. Dignon | 441 | Changes in the geographical distributions of global emissions of NO_x and SO_x from fossil-fuel combustion between 1966 and 1980 |
| E. Noma, B. Berglund, U. Berglund,
I. Johansson and J. C. Baird | 451 | Joint representation of physical locations and volatile organic compounds in indoor air from a healthy and a sick building |
| J. D. Sinclair, L. A. Psota-Kelty and
C. J. Weschler | 461 | Indoor/outdoor ratios and indoor surface accumulations of ionic substances at Newark, New Jersey |
| M. Segal, C.-H. Yu, R. W. Arritt and
R. A. Pielke | 471 | On the impact of valley/ridge thermally induced circulations on regional pollutant transport |
| M. E. Jenkin, R. A. Cox and
D. J. Williams | 487 | Laboratory studies of the kinetics of formation of nitrous acid from the thermal reaction of nitrogen dioxide and water vapour |
| A. P. Altshuller | 499 | Some characteristics of ozone formation in the urban plume of St. Louis, MO |
| B. D. McVeety and R. A. Hites | 511 | Atmospheric deposition of polycyclic aromatic hydrocarbons to water surfaces: a mass balance approach |
| J. Neubauer and K. G. Heumann | 537 | Nitrate trace determinations in snow and firn core samples of ice shelves at the Weddell Sea, Antarctica |
| G. Ellenton, P. K. Misra and B. Ley | 547 | The relative roles of emissions changes and meteorological variability in variation of wet sulfur deposition: a trajectory model study |

M. O. Amdur, L. C. Chen, J. Guty, H. F. Lam and P. D. Miller	557	Speciation and pulmonary effects of acidic SO ₂ formed on the surface of ultrafine zinc oxide aerosols
A. L. Beaman	561	A novel approach to estimating the odour concentration distribution in the community
B. Galle, A. Sunesson and W. Wendt	569	NO ₂ -mapping using laser-radar techniques
D. L. Fox, L. Stockburger, W. Weathers, C. W. Spicer, G. I. Mackay, H. I. Schiff, D. J. Eatough, F. Mortensen, L. D. Hansen, P. B. Shepson, T. E. Kleindienst and E. O. Edney	575	Intercomparison of nitric acid diffusion denuder methods with tunable diode laser absorption spectroscopy
K. E. Thrane	587	Application of air pollution models: a comparison of different techniques for estimating ambient air pollution levels and source contributions
C. Bellver	595	Luminance and polarization of the sky light at Seville (Spain) measured in white light
<i>Short Communication</i>		
K. E. Noll and E. Khalili	601	Dry deposition of sulfate associated with pollen
<i>Technical Note</i>		
C. Lin and S. K. Friedlander	605	A note on the use of glass fiber filters in the thermal analysis of carbon containing aerosols
<i>Discussion</i>		
D. H. Lowenthal, K. A. Rahn, V. A. Dutkiewicz, P. P. Parekh and L. Husain	609	An evaluation of regional elemental signatures relevant to the northeastern United States
<i>News Section</i>		
Introduction	617	
Calendar	617	
Announcements	618	
New Products and Services	620	
Recent Titles of Interest	622	

Number 4

T. J. Overcamp and T. Ku	625	Plume rise from two or more adjacent stacks
P. Masclet, P. Pistikopoulos, S. Beyne and G. Mouvier	639	Long range transport and gas/particle distribution of polycyclic aromatic hydrocarbons at a remote site in the Mediterranean Sea
M. Kumari and O. P. Sharma	651	A model study for ambient air quality analysis using routine meteorological observations
A. T. Cocks and I. S. Fletcher	663	Major factors influencing gas-phase chemistry in power-plant plumes during long-range transport—I. Release time and dispersion rate for dispersion into a 'rural' ambient atmosphere

R. Smith and B. E. A. Fisher	677	A simple analytical model for oxidation in single and overlapping power-station plumes
A. S. Chandler, T. W. Choularton, G. J. Dollard, M. J. Gay, T. A. Hill, A. Jones, B. M. R. Jones, A. P. Morse, S. A. Penkett and B. J. Tyler	683	A field study of the cloud chemistry and cloud microphysics at Great Dun Fell
C. Leuenberger, J. Czuczwa, E. Heyerdahl and W. Giger	695	Aliphatic and polycyclic aromatic hydrocarbons in urban rain, snow and fog
P. P. Parekh and L. Husain	707	Selective leaching of atmospheric aerosols: resolution of limestone and cement
R. W. Arritt, R. A. Pielke and M. Segal	715	Variations of sulfur dioxide deposition velocity resulting from terrain-forced mesoscale circulations
W. A. H. Asman, B. Drukker and A. J. Janssen	725	Modelled historical concentrations and depositions of ammonia and ammonium in Europe
A. Venkatram, P. K. Karamchandani and P. K. Misra	737	Testing a comprehensive acid deposition model
M. Blumthaler and W. Ambach	749	Human solar ultraviolet radiant exposure in high mountains
W. K. Weisweiler and B. U. Schwarz	755	A method for the qualitative and quantitative detection of individual NH_4^+ -containing aerosols
K. Keiding, J. Pedersen and F. Palmgren Jensen	763	A comparison of two procedures for modelling of absolute source contributions in urban air
H. K. Al-Omishy and H. S. Al-Samarrai	769	Road traffic simulation model for predicting pollutant emissions
G. H. Miles and R. W. Simpson	775	The general applicability of a model to control violations of short-term exposure standards for TSP
A. R. Riebau, D. G. Fox, M. L. Sestak, B. Dailey and S. F. Archer	783	Simple approach smoke estimation model
J. C. Wilson, A. Gupta, K. T. Whitby and W. E. Wilson	789	Measured aerosol light scattering coefficients compared with values calculated from EAA and optical particle counter measurements: improving the utility of the comparison
O. Sen	795	Variations of aerosols at Izmir, Turkey determined by neutron activation analysis
U. Högström, D. N. Asimakopoulos, H. Kambezidis, C. G. Helmis and A. Smedman	803	A field study of the wake behind a 2 MW wind turbine
<i>Short Communication</i>		
R. Conrad, H. Schütz and W. Seiler	821	Emission of carbon monoxide from submerged rice fields into the atmosphere
<i>Discussion</i>		
R. H. Ball, J. A. Fay and D. Golomb	825	Anthropogenic nitrogen oxide transport and deposition in eastern North America

<i>News Section</i>	
Introduction	827
Calendar	827
Announcements	828
New Products and Services	829
Recent Titles of Interest	830

Number 5

E. M. Shaver and L. J. Forney	833	Properties of industrial dense gas plumes
S. M. Viessman and S. Raman	839	Boundary layer wind parameterization for use in a Lagrangian trajectory model
D. A. Wheeler	853	Atmospheric dispersal and deposition of radioactive material from Chernobyl
A. Venkatram	865	An interpretation of Taylor's statistical analysis of particle dispersion
D. Baldocchi	869	A multi-layer model for estimating sulfur dioxide deposition to a deciduous oak forest canopy
J. E. Dunn and B. A. Tichenor	885	Compensating for sink effects in emissions test chambers by mathematical modeling
T. J. Butler	895	Composition of particles dry deposited to an inert surface at Ithaca, New York
P. J. Dillon, M. Lusi, R. Reid and D. Yap	901	Ten-year trends in sulphate, nitrate and hydrogen deposition in central Ontario
J. Czuczwa, C. Leuenberger and W. Giger	907	Seasonal and temporal changes of organic compounds in rain and snow
R. W. Wiener, K. Okazaki and K. Willeke	917	Influence of turbulence on aerosol sampling efficiency
J.-L. Jaffrezzo and J.-L. Colin	929	Rain-aerosol coupling in urban area: scavenging ratio measurement and identification of some transfer processes
J. R. Scudlark and T. M. Church	937	The atmospheric deposition of arsenic and association with acid precipitation
D. P. Miller	945	Low-level determination of nitrogen dioxide in ambient air using the Palmes Tube
P. K. Dasgupta, S. Dong, H. Hwang, H.-C. Yang and Z. Genfa	949	Continuous liquid-phase fluorometry coupled to a diffusion scrubber for the real-time determination of atmospheric formaldehyde, hydrogen peroxide and sulfur dioxide
G. Valaoras, J. J. Huntzicker and W. H. White	965	On the contribution of motor vehicles to the Athenian "nephos": an application of factor signatures

E. Peake, M. A. MacLean, P. F. Lester and H. S. Sandhu	973 Peroxyacetylnitrate (PAN) in the atmosphere of Edmonton, Alberta, Canada
B. R. T. Simoneit, R. E. Cox and L. J. Standley	983 Organic matter of the troposphere—IV. Lipids in Harmattan aerosols of Nigeria
R. Westerholm, U. Stenberg and T. Alsberg	1005 Some aspects of the distribution of polycyclic aromatic hydrocarbons (PAH) between par- ticles and gas phase from diluted gasoline exhausts generated with the use of a dilution tunnel, and its validity for measurement in ambient air
<i>Short Communication</i>	
M. Legrand and C. Saigne	1011 Formate, acetate and methanesulfonate mea- surements in Antarctic ice: some geochemical implications
<i>Technical Note</i>	
A. Sudbury	1019 Pollutant concentration downwind of a poly- gonal source
<i>News Section</i>	
Introduction	1023
Calendar	1023
Recent Titles of Interest	1024
Book Reviews (J. P. Lodge, Jr)	1025

Number 6

D. J. Moore	i Editorial
<i>General Papers</i>	
P. B. Ryan, J. D. Spengler and P. F. Halfpenny	1031 Sequential box models for indoor air quality: application to airliner cabin air quality
A. H. Huber	1039 Performance of a Gaussian model for center- line concentrations in the wake of buildings
P. Cagnetti, F. Desiato, P. Gaglione and A. Pellegrini	1051 An atmospheric diffusion study on a local scale at a coastal site
J. N. Carras and D. J. Williams	1061 Measurements of relative σ , up to 1800 km from a single source
B. Benech, P. Van Dinh, A. Ezcurra and J. L. Lesne	1071 Investigation of a 1000-MW smoke plume by means of a 1.064 μm lidar—II. Determination of diffusion characteristics of the plume particles
M. Dunst	1085 On the turbulent diffusivity tensor in dispersion problems
P. A. Clark and A. T. Cocks	1097 Mixing models for the simulation of plume interaction with ambient air

B. J. Finlayson-Pitts and S. N. Johnson	1107	The reaction of NO_2 with NaBr: possible source of BrNO in polluted marine atmospheres
W. Behnke, W. Holländer, W. Koch, F. Nolting and C. Zetzsch	1113	A smog chamber for studies of the photochemical degradation of chemicals in the presence of aerosols
A. M. Hough and C. Reeves	1121	Photochemical oxidant formation and the effects of vehicle exhaust emission controls in the U.K. The results from 20 different chemical mechanisms
S. M. Joffre	1137	Modelling the dry deposition velocity of highly soluble gases to the sea surface
J. H. Lee and I. N. Tang	1147	Accommodation coefficient of gaseous NO_2 on water surfaces
J.-W. Erisman, A. W. M. Vermetten, W. A. H. Asman, A. Waijers-Ijpelaar and J. Slanina	1153	Vertical distribution of gases and aerosols: the behaviour of ammonia and related components in the lower atmosphere
D. Yap, D. T. Ning and W. Dong	1161	An assessment of source contributions to the ozone concentrations in southern Ontario, 1979-1985
J. Völkening, H. Baumann and K. G. Heumann	1169	Atmospheric distribution of particulate lead over the Atlantic Ocean from Europe to Antarctica
R. M. Hirsch and N. E. Peters	1175	Short-term trends in sulfate deposition at selected bulk precipitation stations in New York
W. T. Sturges and L. A. Barrie	1179	Chlorine, bromine and iodine in Arctic aerosols
P. Middleton, J. S. Chang, J. C. del Corral, H. Geiss and J. M. Rosinski	1195	Comparison of RADM and OSCAR precipitation chemistry data
L. I. Kleinman	1209	Evaluation of SO_2 emission scenarios with a nonlinear atmospheric model
A. Venkatram	1221	Inherent uncertainty in air quality modeling
A. S. Lefohn, J. A. Laurence and R. J. Kohut	1229	A comparison of indices that describe the relationship between exposure to ozone and reduction in the yield of agricultural crops
<i>Discussions</i> V. C. Runeckles, A. S. Lefohn, J. A. Laurence and R. J. Kohut	1241	A comparison of indices that describe the relationship between exposure to ozone and reduction in the yield of agricultural crops
B. A. Marie, D. P. Ormrod, A. S. Lefohn, C. E. Davis, C. K. Jones, D. T. Tingey and W. E. Hogsett	1243	Co-occurrence patterns of gaseous air pollutant pairs at different minimum concentrations in the United States
<i>News Section</i> Introduction	1245	
Calendar	1245	

New Products	1250
Recent Titles of Interest	1251
Errata	1253
New Patents	i

Number 7

H. Horvath, I. Kreiner, C. Norek, O. Preining and B. Georgi	1255 Diesel emissions in Vienna
C. Turfus	1271 Calculating mean concentrations for steady sources in recirculating wakes by a particle trajectory method
J. D. Kahl and P. J. Samson	1291 Trajectory sensitivity to rawinsonde data resolution
K. Sasaki, H. Kurita, G. R. Carmichael, Y.-S. Chang, K. Murano and H. Ueda	1301 Behavior of sulfate, nitrate and other pollutants in the long-range transport of air pollution
L. W. Burger and M. Mulholland	1309 Real-time prediction of point-source distributions using an anemometer-bivane and a microprocessor
M. Segal, R. A. Pielke, R. W. Arritt, M. D. Moran, C.-H. Yu and D. Henderson	1319 Application of a mesoscale atmospheric dispersion modeling system to the estimation of SO ₂ concentrations from major elevated sources in southern Florida
R. H. Varey, D. J. Ball, A. J. Crane, D. P. H. Laxen and F. J. Sandalls	1335 Ozone formation in the London plume
A. G. Allen, R. M. Harrison and M. T. Wake	1347 A meso-scale study of the behaviour of atmospheric ammonia and ammonium
D. Fowler, J. N. Cape, I. D. Leith, T. W. Choularton, M. J. Gay and A. Jones	1355 The influence of altitude on rainfall composition at Great Dun Fell
T. W. Choularton, M. J. Gay, A. Jones, D. Fowler, J. N. Cape and I. D. Leith	1363 The influence of altitude on wet deposition. Comparison between field measurements at Great Dun Fell and the predictions of a seeder-feeder model
S. H. Cadle and J. M. Dasch	1373 Wintertime concentrations and sinks of atmospheric particulate carbon at a rural location in northern Michigan
D. J. Hall and S. L. Upton	1383 A wind tunnel study of the particle collection efficiency of an inverted Frisbee used as a dust deposition gauge
L. S. Austin and G. E. Millward	1395 Simulated effects of tropospheric emissions on the global antimony cycle
J. F. Pankow	1405 The calculated effects of non-exchangeable material on the gas-particle distributions of organic compounds

A. H. Knap, K. S. Binkley and R. S. Artz	1411	The occurrence and distribution of trace organic compounds in Bermuda precipitation
C. T. Garten, Jr, E. A. Bondietti and R. D. Lomax	1425	Contribution of foliar leaching and dry deposition to sulfate in net throughfall below deciduous trees
P. T. Williams, M. Radojevic and A. G. Clarke	1433	Dissolution of trace metals from particles of industrial origin and its influence on the composition of rainwater
T. Schumann, B. Zinder and A. Waldvogel	1443	Aerosol and hydrometeor concentrations and their chemical composition during winter precipitation along a mountain slope—I. Temporal evolution of the aerosol, microphysical and meteorological conditions
K. E. Noll, K. Y. P. Fang and L. A. Watkins	1461	Characterization of the deposition of particles from the atmosphere to a flat plate
M. T. Dana and W. G. N. Slinn	1469	Acidic deposition distribution and episode statistics from the MAP3S network database
R. Steenkist	1475	Episodes of high SO ₂ concentration in The Netherlands
D. C. DeLorey, D. R. Cronn and J. C. Farmer	1481	Tropospheric latitudinal distributions of CF ₂ Cl ₂ , CFCl ₃ , N ₂ O, CH ₃ CCl ₃ and CCl ₄ over the remote Pacific Ocean
<i>Letters to the Editors</i>		
M. R. Fidalgo, J. Mateos and J. Garmendia	1495	The origin of some of the elements contained in the aerosols of Salamanca (Spain)
S. M. Kreidenweis and J. H. Seinfeld	1499	Effect of surface tension of aqueous methanesulfonic acid solutions upon nucleation and growth of aerosol
<i>Short Communications</i>		
S. Lal, B. H. Subbaraya, R. Borchers and P. Fabian	1501	Surface measurements of trace gases in the tropical region near Hyderabad
S. Glavas	1505	A wet-only precipitation study in a Mediterranean site, Patras, Greece
<i>Discussion</i>		
M. J. Chadwick, J. G. Cooke and R. W. Shaw	1509	Towards a targetted emission reduction in Europe
<i>News Section</i>		
Introduction	1513	
Calendar	1513	
New Products	1514	
Recent titles of interest	1515	
New Patents	i	

Number 8

The Nitrogen Species Methods Comparison Study

- | | | |
|--|------|---|
| D. R. Lawson | 1517 | The Nitrogen Species Methods Comparison Study: an overview |
| S. V. Hering, D. R. Lawson,
I. Allegrini, A. Febo, C. Perrino,
M. Possanzini, J. E. Sickles, II,
K. G. Anlauf, A. Wiebe, B. R. Appel,
W. John, J. Ondo, S. Wall,
R. S. Braman, R. Sutton, G. R. Cass,
P. A. Solomon, D. J. Eatough,
N. L. Eatough, E. C. Ellis,
D. Grosjean, B. B. Hicks,
J. D. Womack, J. Horrocks,
K. T. Knapp, T. G. Ellestad,
R. J. Paur, W. J. Mitchell,
M. Pleasant, E. Peake, A. Maci ean,
W. R. Pierson, W. Brachaczek,
H. I. Schiff, G. I. Mackay,
C. W. Spicer, D. H. Stedman,
A. M. Winer, H. W. Biermann and
E. C. Tuazon | 1519 | The nitric acid shootout: field comparison of measurement methods |
| M. D. Zeldin, L. D. Bregman and
B. Wylie | 1541 | Meteorological conditions during the 1985 southern California Nitrogen Species Methods Comparison Study |
| H. W. Biermann, E. C. Tuazon,
A. M. Winer, T. J. Wallington and
J. N. Pitts, Jr. | 1545 | Simultaneous absolute measurements of gaseous nitrogen species in urban ambient air by long pathlength infrared and ultraviolet-visible spectroscopy |
| G. I. Mackay, H. I. Schiff,
A. Wiebe and K. Anlauf | 1555 | Measurements of NO ₂ , H ₂ CO and HNO ₃ by tunable diode laser absorption spectroscopy during the 1985 Claremont intercomparison study |
| B. R. Appel, Y. Tokiwa,
E. L. Kothny, R. Wu and V. Povard | 1565 | Evaluation of procedures for measuring atmospheric nitric acid and ammonia |
| M. R. Burkhardt, M. P. Buhr,
J. D. Ray and D. H. Stedman | 1575 | A continuous monitor for nitric acid |
| K. G. Anlauf, D. C. MacTavish,
H. A. Wiebe, H. I. Schiff and
G. I. Mackay | 1579 | Measurement of atmospheric nitric acid by the filter method and comparisons with the tuneable diode laser and other methods |
| P. A. Solomon, S. M. Larson,
T. Fall and G. R. Cass | 1587 | Basinwide nitric acid and related species concentrations observed during the Claremont Nitrogen Species Comparison Study |
| T. G. Ellestad and K. T. Knapp | 1595 | The sampling of reactive atmospheric species by transition-flow reactor: application to nitrogen species |
| N. L. Eatough, S. McGregor,
E. A. Lewis, D. J. Eatough,
A. A. Huang and E. C. Ellis | 1601 | Comparison of six denuder methods and a filter pack for the collection of ambient HNO ₃ (g), HNO ₂ (g) and SO ₂ (g) in the 1985 NSMC study |

J. E. Sickles, II, C. Perrino, I. Allegrini, A. Febo, M. Possanzini and R. J. Paur	1619	Sampling and analysis of ambient air near Los Angeles using an annular denuder system
W. John, S. M. Wall and J. L. Ondo	1627	A new method for nitric acid and nitrate aerosol measurement using the Dichotomous sampler
D. Grosjean	1637	Aldehydes, carboxylic acids and inorganic nitrate during NSMCS
S. M. Wall, W. John and J. L. Ondo	1649	Measurement of aerosol size distributions for nitrate and major ionic species
W. R. Pierson, W. W. Brachaczek, S. M. Japar, G. R. Cass and P. A. Solomon	1657	Dry deposition and dew chemistry in Claremont, California, during the 1985 Nitrogen Species Methods Comparison Study
W. R. Pierson and W. W. Brachaczek	1665	Coarse- and fine-particle atmospheric nitrate and $\text{HNO}_3(\text{g})$ in Claremont, California, during the 1985 Nitrogen Species Methods Comparison Study
C. L. Benner, N. L. Eatough, E. A. Lewis, D. J. Eatough, A. A. Huang and E. C. Ellis	1669	Diffusion coefficients for ambient nitric and nitrous acids from denuder experiments in the 1985 Nitrogen Species Methods Comparison Study
<i>General Papers</i>		
G. E. Moore, L. B. Milich and M. K. Liu	1673	Plume behaviors observed using lidar and SF_6 tracer at a flat and hilly site
J. A. A. R. Schuurkes, M. M. J. Maenen and J. G. M. Roelofs	1689	Chemical characteristics of precipitation in NH_3 -affected areas
K. J. Olszyna, J. F. Meagher and E. M. Bailey	1699	Gas-phase, cloud and rain-water measurements of hydrogen peroxide at a high-elevation site
S. B. Idso	1707	Development of a simplified plant stomatal resistance model and its validation for potentially transpiring and water-stressed water hyacinths
G. J. Keeler, W. W. Brachaczek, R. A. Gorse, Jr, S. M. Japar and W. R. Pierson	1715	Effect of ambient humidity on dichotomous sampler coarse/fine ratios
G. N. Lipatov, S. A. Grinshpun, T. I. Semenyuk and A. G. Sutugin	1721	Secondary aspiration of aerosol particles into thin-walled nozzles facing the wind
T. L. Vossler, R. K. Stevens, R. J. Paur, R. E. Baumgardner and J. P. Bell	1729	Evaluation of improved inlets and annular denuder systems to measure inorganic air pollutants
A. L. Dutot, G. Bergametti and P. Buat-Menard	1737	Application of correspondence analysis to apportion sources of ambient particles
M. Glikson, R. Simpson, H. Polach and J. Taylor	1745	Microscopical TSP studies comparing a city centre and suburban sites in Canberra, Australia

H. Hauck and H. Kolb	1759	Consistency of different statistical parameters describing air pollution data for sulfur dioxide
<i>News Section</i>		
Introduction	1765	
Calendar	1765	
New Services	1768	
New Journal	1769	
Recent Titles of Interest	1769	
Book Reviews (J. P. Lodge, Jr)	1771	

Number 9

P. K. Hopke	1777	Target Transformation Factor Analysis as an aerosol mass apportionment method: a review and sensitivity study
J. Walczewski and M. Feleksy-Bielak	1793	Diurnal variation of characteristic sodar echoes and the diurnal change of atmospheric stability
G. M. Hidy	1801	Scientific considerations for empirical determination of regional source-receptor relationships
S. A. Batterman, T. G. Dzubay and R. E. Baumgardner	1821	Development of crustal profiles for receptor modeling
D. H. Lowenthal and K. A. Rahn	1829	Reproducibility of regional apportionments of pollution aerosol in the northeastern United States
J. C. Guichard and M. Lamauv	1835	The laboratory production of the bubbling fraction of the marine aerosol—application to polluted seawater
K. J. Allwine and C. D. Whiteman	1839	Ventilation of pollutants trapped in valleys: a simple parameterization for regional-scale dispersion models
M. Luria, C. C. Van Valin, W. C. Keene, D. L. Wellman, J. N. Galloway and J. F. Boatman	1847	Eastward sulfur flux from the northeastern United States
H. Güsten, G. Heinrich, T. Cvitaš, L. Klasinc, B. Rušćić, D. P. Lalas and M. Petrakis	1855	Photochemical formation and transport of ozone in Athens, Greece
Y. Ide, H. Okamoto and K. Okabayashi	1863	On the parameterization of diffusion in the turbulent boundary layer
F. A. Gifford, S. Barr, R. C. Malone and E. J. Mroz	1871	Tropospheric relative diffusion to hemispheric scales

A. Lopez, J. Fontan, M. O. Barthelemy et A. Minga	1881	Présentation de l'expérience ATILA (action des terpènes et isoprène dans l'atmosphère) effectuée en forêt tempérée au Sud-Ouest de la France (forêt des Landes)
H. M. ApSimon, K. L. Simms and C. G. Collier	1895	The use of weather radar in assessing deposition of radioactivity from Chernobyl across England and Wales
B. Moldan, J. Kopáček and J. Kopáček	1901	Chemical composition of atmospheric precipitation in Czechoslovakia, 1978-1984—II. Event samples
R. A. Bilonick	1909	Monthly hydrogen ion deposition maps for the northeastern U.S. from July 1982 to September 1984
C. Perrino, F. De Santis and A. Febo	1925	Uptake of nitrous acid and nitrogen oxides by nylon surfaces: implications for nitric acid measurement
T. E. Kleindienst, P. B. Shepson, C. M. Nero, R. R. Arnst, S. B. Tejada, G. I. Mackay, L. K. Mayne, H. I. Schiff, J. A. Lind, G. L. Kok, A. L. Lazrus, P. K. Dasgupta and S. Dong	1931	An intercomparison of formaldehyde measurement techniques at ambient concentration
W. G. Cobourn and R. E. Mulrooney	1941	Linearized response of a doped FPD continuous monitor for low-level sulfur measurements
J. F. Boatman, M. Luria, C. C. Van Valin and D. L. Wellman	1949	Continuous atmospheric sulfur gas measurements aboard an aircraft: a comparison between the flame photometric and fluorescence methods
D. L. Savoie	1957	Effect of normal standard errors on lognormal distributions
A. Venkatram	1963	On the use of Kriging in the spatial analysis of acid precipitation data
B. E. A. Fisher	1977	Criteria for the formation of regional photochemical episodes over Europe
C. Pilinis and J. H. Seinfeld	1985	Development and evaluation of an Eulerian photochemical gas-aerosol model
M. Dronamraju, L. K. Peters, G. R. Carmichael, P. Kasibhatla and S.-Y. Cho	2003	An Eulerian transport/transformation/removal model for SO ₂ and sulfate—III. Comparison with the July 1974 SURE database
A. J. Jakeman, B. Jun and J. A. Taylor	2013	On the variability of the wind speed exponent in urban air pollution models
C. S. Sloane	2021	Contribution of NO ₂ and soot to the discoloration of urban skies
C. S. Sloane	2033	Forecasting visibility impairment: a test of regression estimates

Short Communications

M. Lal and A. K. Jain

- 2047 Climatic effect of observed changes in atmospheric trace gases at Antarctica

P. S. Low and H. Bloom

- 2049 Atmospheric deposition of fluoride in the lower Tamar Valley, Tasmania

Discussions

A. Eliassen and W. Klug

- 2057 Treating uncertainty in models of the atmospheric chemistry of nitrogen compounds

J. P. Lodge, Jr

- 2057 Method for the qualitative and quantitative detection of individual
- NH_4^+
- containing aerosols

M. A. J. Parry, W. Day,
A. S. Lefohn and M. R. Ashmore

- 2057 A comparison of indices that describe the relationship between exposure to ozone and the reduction in the yield of agricultural crops

R. L. Petersen and R. M. Dowd

- 2061 Proposed pragmatic methods for estimating plume rise and plume penetration through atmospheric layers

A. Febo, F. De Santis, A. Liberti
and C. Perrino

- 2062 Nitric acid-nitrate aerosol measurements by a diffusion denuder: a performance evaluation

News Section

Introduction

2065

Calendar

2065

New Products

2067

Recent Titles of Interest

2068

Book Reviews (J. P. Lodge, Jr)

2069

New Patents

i

Number 10

*The Human Exposure Assessment Workshop*J. D. Spengler, H. Özkaynak
and L. A. Wallace

- 2075 Introduction to the workshop on human exposure assessment: monitoring and modeling

R. W. Whitmore

- 2077 Design of surveys for residential and personal monitoring of hazardous substances

J. P. Robinson

- 2085 Time-diary research and human exposure assessment: some methodological considerations

P. G. Flachsbart

- 2093 Methodological trends in the design of recent microenvironmental studies of personal CO exposure

W. Ott, J. Thomas, D. Mage
and L. Wallace

- 2101 Validation of the simulation of human activity and pollutant exposure (SHAPE) model using paired days from the Denver, CO, carbon monoxide field study

P. B. Ryan, M. L. Soczek,
R. D. Treitman, J. D. Spengler
and I. H. Billick

- 2115 The Boston residential
- NO_2
- characterization study—II. Survey methodology and population concentration estimates

I. F. Goldstein, L. R. Andrews and D. Hartel	2127	Assessment of human exposure to nitrogen dioxide, carbon monoxide and respirable particulates in New York inner-city residences
L. A. Wallace, E. D. Pellizzari, T. D. Hartwell, R. Whitmore, H. Zelon, R. Perritt and L. Sheldon	2141	The California TEAM study: breath concentrations and personal exposures to 26 volatile compounds in air and drinking water of 188 residents of Los Angeles, Antioch, and Pittsburg, CA
S. M. Gordon, L. A. Wallace, E. D. Pellizzari and H. J. O'Neill	2165	Human breath measurements in a clean-air chamber to determine half-lives for volatile organic compounds
W. E. Lambert, S. D. Colome and S. L. Wojciechowski	2171	Application of end-expired breath sampling to estimate carboxyhemoglobin levels in community air pollution exposure assessments
L. Wallace, J. Thomas, D. Mage and W. Ott	2183	Comparison of breath CO, CO exposure, and Coburn model predictions in the U.S. EPA Washington-Denver (CO) study
Y. Yanagisawa, H. Nishimura, H. Matsuki, F. Osaka and H. Kasuga	2195	Urinary hydroxyproline to creatinine ratio as a biological effect marker for exposure to NO ₂ and tobacco smoke
A. V. Nero, Jr.	2205	Estimated risk of lung cancer from exposure to radon decay products in U.S. homes: a brief review
<i>General Papers</i>		
J. M. Pacyna and B. Ottar	2213	Vertical distribution of aerosols in the Norwegian Arctic
V. A. Dutkiewicz and L. Husain	2223	Spatial pattern of non-urban Se concentrations in the Northeastern U.S. and its pollution source implications
I. P. Castro, W. H. Snyder and R. E. Lawson, Jr.	2229	Wind direction effects on dispersion from sources downwind of steep hills
G. E. Shaw	2239	Chemical air mass systems in Alaska
T. Nielsen	2249	The decay of benzo(a)pyrene and cyclopenteno(cd)pyrene in the atmosphere
J. M. Dasch	2255	Hydrological and chemical inputs to fir trees from rain and clouds during a 1-month study at Clingmans Peak, NC
E. O. Edney, S. F. Cheek, D. C. Stiles, E. W. Corse, M. L. Wheeler, J. W. Spence, F. H. Haynie and W. E. Wilson, Jr	2263	Effects of acid deposition on paints and metals: results of a controlled field study
M. Ferm, H. Areskoug, J.-E. Hanssen, G. Hilbert and H. Lättilä	2275	Field intercomparison of measurement techniques for total NH ₄ ⁺ and total NO ₃ ⁻ in ambient air
E. Tsani-Bazaca, S. Glavas and H. Güsten	2283	Peroxyacetyl nitrate (PAN) concentrations in Athens, Greece
L. C. Nkemdirim	2287	An assessment of the relationship between functional groups of weather elements and atmospheric pollution in Calgary, Canada
W. A. Van Borm and F. C. Adams	2297	Cluster analysis of electron microprobe analysis data of individual particles for source apportionment of air particulate matter

H. S. Javitz, J. G. Watson and N. Robinson	2309	Performance of the chemical mass balance model with simulated local-scale aerosols
C. Bellver	2323	Estimation of the influence of particulate pollution on the degree of polarization of the sky-light scattered by the atmospheric aerosol
<i>Letter to the Editors</i>		
D. A. Jaffe	2329	Accuracy of measured ammonium nitrate equilibrium values
<i>Discussion</i>		
S. E. Schwartz, S. L. Clegg and P. Brimblecombe	2331	Henry's Law and sheep's tails
<i>News & Opinions</i>		
Introduction	2335	
Calendar	2335	
New Services	2338	
Recent Titles of Interest	2338	
Opinion: Carbon dioxide and climate in the Vostok ice core (S. B. Idso)	2341	

Number 11

<i>The Western Atlantic Ocean Experiment-85</i>		
J. N. Galloway	2343	WATOX-85: a preface
J. N. Galloway, R. S. Artz, U. Dayan, R. F. Pueschel and J. F. Boatman	2345	WATOX-85: an aircraft and ground sampling program to determine the transport of trace gases and aerosols across the Western Atlantic Ocean
R. S. Artz, G. D. Rolph and J. Harris	2361	Meteorological summary of four WATOX 1985 research intensives
R. F. Pueschel, J. F. Boatman and R. S. Artz	2371	Aerosols over the Western Atlantic: scale heights, concentrations and fluxes
D. R. Hastie, H. I. Schiff, D. M. Whelpdale, R. E. Peterson, W. H. Zoller and D. L. Anderson	2381	Nitrogen and sulphur over the Western Atlantic Ocean
D. R. Hastie, H. I. Schiff, D. M. Whelpdale, R. E. Peterson, W. H. Zoller, D. L. Anderson and T. M. Church	2393	Description and intercomparison of techniques to measure N and S compounds in the Western Atlantic Ocean experiment
C. C. Van Valin and M. Luria	2401	O ₃ , CO, hydrocarbons and dimethyl sulfide over the Western Atlantic Ocean
<i>General Papers</i>		
Y. Mamane	2411	Estimate of municipal refuse incinerator con- tribution to Philadelphia aerosol—I. Source analysis
A. Jones and T. W. Choularton	2419	A model of wet deposition to complex terrain

A. Albergel, D. Martin, B. Strauss and J.-M. Gros	2431	The Chernobyl accident: modelling of dispersion over Europe of the radioactive plume and comparison with air activity measurements
R. T. McNider, M. D. Moran and R. A. Pielke	2445	Influence of diurnal and inertial boundary-layer oscillations on long-range dispersion
T. E. Pierce	2463	An air pollution climatology around an isolated point source using convective scaling parameters
D. K. Brandvold and P. Martinez	2477	The $\text{NO}_x/\text{N}_2\text{O}$ fixation ratio from electrical discharges
W. R. Stockwell, J. B. Milford, G. J. McRae, P. Middleton and J. S. Chang	2481	Nonlinear coupling in the NO_x - SO_x reactive organic system
S. E. Schwartz	2491	Mass-transport limitation to the rate of in-cloud oxidation of SO_2 : re-examination in the light of new data
H. M. E. Miedema and J. M. Ham	2501	Odour annoyance in residential areas
H. Van Langenhove, A. Lootens and N. Schamp	2509	Objective evaluation of an odour nuisance problem based on inquiry results
L. W. A. van Hove, W. J. M. Tonk, G. A. Pieters, E. H. Adema and W. J. Vredenberg	2515	A leaf chamber for measuring the uptake of pollutant gases at low concentrations by leaves, transpiration and carbon dioxide assimilation
J. D. Marshall and M. A. Ferman	2525	An exposure facility for examining the physiological basis of air pollutant effects on plant growth
B. R. Appel, V. Povard and E. L. Kóthy	2535	Loss of nitric acid within inlet devices intended to exclude coarse particles during atmospheric sampling
M. P. Keuken, C. A. M. Schoonebeek, A. van Wensveen-Louter and J. Slanina	2541	Simultaneous sampling of NH_3 , HNO_3 , HCl , SO_2 and H_2O_2 in ambient air by a wet annular denuder system
R. J. Lyall, M. A. Hooper and S. J. Mainwaring	2549	Polycyclic aromatic hydrocarbons in the Latrobe Valley
H. D. Kambezidis and N. S. Papanikolaou	2557	SO_2 concentration levels from a monitoring network in Athens, Greece
M. C. Okur	2569	On fitting the generalized λ -distribution to air pollution data
J. B. Shukla and R. S. Chauhan	2573	Unsteady state dispersion of air pollutant from a time dependent point source forming a secondary pollutant
I. N. Tang, H. R. Munkelwitz and J. H. Lee	2579	Vapor-liquid equilibrium measurements for dilute nitric acid solutions
R. L. Hightower and C. B. Richardson	2587	Evaporation of ammonium nitrate particles containing ammonium sulfate

F. Bruynseels, H. Storms, R. Van Grieken and L. Van der Auwera	2593	Characterization of North Sea aerosols by individual particle analyses
<i>Short Communications</i>		
W. H. Benner and M. Bizjak	2603	Pseudo first-order reaction rate constant for the formation of hydroxymethylhydroperoxide from formaldehyde and hydrogen peroxide
D. Möller	2607	Production of free radicals by an ozone-alkene reaction—a possible factor in the new-type forest decline?
D. O'Hara and H. B. Singh	2613	Sensitive gas chromatographic detection of acetaldehyde and acetone using a reduction gas detector
G. Petersson	2617	High ambient concentrations of monoterpenes in a Scandinavian pine forest
N. Yamamoto, N. Kabeya, M. Onodera, S. Takahahi, Y. Komori, E. Nakazuka and T. Shirai	2621	Seasonal variation of atmospheric ammonia and particulate ammonium concentrations in the urban atmosphere of Yokohama over a 5-year period
<i>Technical Note</i>		
A. I. I. Ette and D. O. Olorode	2625	The effects of the Harmattan dust on air conductivity and visibility at Ibadan, Nigeria
<i>Correspondence</i>		
M. E. Kitto and D. L. Anderson	2629	The use of Whatman-41 filters for particle collection
<i>News & Opinions</i>		
Introduction	2631	
Calendar	2631	
Recent Titles of Interest	2634	
Opinion: Carbon dioxide and climate in the Vostok ice core: why does the system oscillate? (T. Roger S. Wilson)	2637	

Number 12

<i>Review Articles</i>		
K. W. Nicholson	2639	A review of particle resuspension
K. W. Nicholson	2653	The dry deposition of small particles: a review of experimental measurements
<i>General Papers</i>		
M. S. El-Shobokshy and F. M. Hussein	2667	Correlation between indoor-outdoor inhalable particulate concentrations and meteorological variables
W. G. Hoydysh and W. F. Dabberdt	2677	Kinematics and dispersion characteristics of flows in asymmetric street canyons

Y. Nakamura and T. R. Oke	2691	Wind, temperature and stability conditions in an east-west oriented urban canyon
M. Bennett	2701	A simple physical model of dry deposition to a rough surface
W. Marquardt and P. Ihle	2707	Acidic and alkaline precipitation components in the mesoscale range under the aspect of meteorological factors and the emissions
R. C. Easter and D. J. Luecken	2715	A simulation of sulfur wet deposition and its dependence on the inflow of sulfur species to storms
B. Zinder, T. Schumann and A. Waldvogel	2741	Aerosol and hydrometeor concentrations and their chemical composition during winter precipitation along a mountain slope—II. Enhancement of below-cloud scavenging in a stably stratified atmosphere
S. G. Zemba, D. Golomb and J. A. Fay	2751	Wet sulfate and nitrate deposition patterns in Eastern North America
C. U. Ro, A. J. S. Tang, W. H. Chan, R. W. Kirk, N. W. Reid and M. A. Lusi	2763	Wet and dry deposition of sulfur and nitrogen compounds in Ontario
K. J. Noone and A. D. Clarke	2773	Soot scavenging measurements in Arctic snowfall
A. Ezcurra, H. Casado, J. P. Lacaux and C. Garcia	2779	Relationships between meteorological situations and acid rain in Spanish Basque country
K. Guertin, J.-P. Villeneuve, S. Deschênes and G. Jacques	2787	The choice of working variables in the geo-statistical estimation of the spatial distribution of ion concentration from acid precipitation
A. Sicherer-Roetman, M. Ramlal, C. E. Voogd and H. J. Th. Bloemen	2803	The fractionation of extracts of ambient particulate matter for mutagenicity testing
R. K. R. Vupputuri	2809	Potential effects of anthropogenic trace gas emissions on atmospheric ozone and temperature structure and surface climate
M. L. Williams, G. F. J. Broughton, J. S. Bower, V. J. Drury, K. Lilley, K. Powell, F. S. M. Rogers and K. J. Stevenson	2819	Ambient NO _x concentrations in the U.K. 1976-1984—a summary
H. Puxbaum, C. Rosenberg, M. Gregori, C. Lanzerstorfer, E. Ober and W. Winiwarter	2841	Atmospheric concentrations of formic and acetic acid and related compounds in eastern and northern Austria
M. Bizjak, W. H. Benner, A. D. A. Hansen, D. Hrček, V. Hudnik and T. Novakov	2851	Spatial and temporal variations of aerosol sulfate and trace elements in a source-dominated urban environment
B. Arganza García, J. M. Fernández Díaz, L. Garzón Ruipérez and A. Lopez	2863	Concentration, sources and particle size distribution of the atmospheric aerosol of the Oviedo urban nucleus (Spain)
P. Winkler and U. Kaminski	2871	Increasing submicron particle mass concentration at Hamburg—I. Observations

U. Kaminski and P. Winkler	2879	Increasing submicron particle mass concentration at Hamburg—II. Source discussion
<i>Letter to the Editors</i>		
K. W. Nicholson and T. D. Davies	2885	The dry deposition of sulphur dioxide at a rural site
<i>Short Communication</i>		
E. Peake, M. A. MacLean and H. S. Sandhu	2891	Total inorganic nitrate (particulate nitrate and nitric acid) in the atmosphere of Edmonton, Alberta, Canada
<i>News and Opinions</i>		
Introduction	2895	
Calendar	2895	
Recent Titles of Interest	2897	
Book Reviews (J. P. Lodge, Jr)	2899	

